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CHALLENGES AND CONSTRAINTS TO ENHANCE THE ENTREPRENEURSHIP EDUCATION IN HIGHER EDUCATIONAL INSTITUTIONS OF A DEVELOPING COUNTRY: EVIDENCE FROM SRI LANKA

T.M.A. Tennakoon[1], Kennedy Gunawardena[2], S.P.Premaratne[3]

ABSTRACT

This study through an exploratory approach review the challenges and constraints faced in enhancing entrepreneurship education in developing countries using Sri Lanka as a case study. Previous studies on the subject matter is very scarce and even in international journals only few papers appeared on entrepreneurship education in developing countries. The purpose of this paper is to study the current entrepreneurship education system in Sri Lankan state universities with reference to challenges and constraints and to propose an action plan to raise entrepreneurship education in Sri Lanka to be in par with that of developed nations so that these universities can act as the centerpieces of business innovations and entrepreneurship development. This paper employs an exploratory study approach by analyzing current entrepreneurship education system in Sri Lanka by reviewing secondary data such as various journals and government publications to build the arguments and recommendations outlined. Among constraints and challenges for the development of entrepreneurship education, lack of resources, lack of entrepreneurial skills in lecturers, poor stake-holder engagement, weak government policies and industry – university gap are common to most developing countries. In addition with its free education policy, Sri Lankan universities are faced with strict university entrance procedures and lack of selection of desired courses for majority of students. Findings of this study and salient suggestions will be an invaluable toolkit for policy makers to design effective strategies for entrepreneurship education in developing countries.

Keywords: *Entrepreneurship, entrepreneurship education, university, developing countries, Sri Lanka*

1. INTRODUCTION

In developing countries employing university graduates in suitable places has become a national issue. Brown (2003) claims that traditional degrees provided by universities fail to create market demand and job opportunities. To address this issue many universities in developing countries have added entrepreneurship courses to their curriculum (Matlay and Farashah, 2013).

Developing countries are focusing more on entrepreneurship education in Higher Educational Institutions to support national competitiveness and economic growth. The challenges for the developing countries to enhance their entrepreneurship education in Higher Educational Institutions have been the lack of supportive environments in institutions. There is a lack of research in Graduate Entrepreneurship, role of higher education in entrepreneurship education in the developing world (Nabi and Linan, 2011).

Through the development of curriculum and entrepreneurial learning activities, higher educational institutions are able to groom students by raising their awareness, way of thinking, motivation, developing skills and attitudes to become potential entrepreneurs. Since lately entrepreneurship education has been receiving increasing attention worldwide and governments have and will continue to invest significant resources to develop entrepreneurship education.

Trends of entrepreneurship education in higher education is growing and entrepreneurship course offerings by colleges and universities have exceeded three thousand worldwide (Kuratko and Morris, 2018).

The author(s) are, [1]PhD Candidate of the University of Sri Jayewardenapura and [2]Senior Professor at the Faculty of Finance and Management, University of Sri Jyawardenapura, Sri Soratha Mawatha, Nugegoda, Sri Lanka, [3]Professor at the Department of Economics, University of Colombo, Kumaratunga Munidasa Mawatha, Colombo 07, Sri Lanka.
Corresponding author(s) can be contacted on, respectively, [1]*anuradhatennakoon14@gmail.com*, [2]*kennedy@sjp.ac.lk* and [3]*sppremaratne@yahoo.com*

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Entrepreneurial attitudes, abilities and aspiration constitutes the Global Entrepreneurship Index which is an indicator of the health of the entrepreneurship ecosystem of a country. In its 2018 ranking the leading developing countries of the Indian sub-continent India, Sri Lanka, Cambodia, Pakistan and Bangladesh have been ranked 68, 90, 113, 120 and 134 respectively out of 137 countries surveyed highlighting comparatively weak entrepreneurship ecosystem in these countries.

The findings of this paper are important to understand the ground realities of the entrepreneurship education of developing countries. The remainder of the paper will focus on Sri Lankan Higher education system and the challenges and constraints to enhance the entrepreneurship education.

2. HIGHER EDUCATION SYSTEM IN SRI LANKA

In Sri Lankan context, the higher (tertiary) education system encompasses all institutions where entry qualifications is the General Certificate of Education (G.C.E) Advanced Level (A/L) or above. These institutions include 1) Universities, campuses and university institutes, 2) Technical Colleges under Ministry of Higher Education, 3) other non-university tertiary institutions such as the Law College, The Institute of Chartered Accountants and 4) Training institutes under tertiary category.

Higher education comprises the activities of learning, teaching, research and training.

For the purpose of this study, the remaining part of this paper will refer only to university education.

With the arrival of Buddhism in Sri Lanka 2269 years ago, its education nurtured around centers of Buddhist monasteries. The British arrived in Sri Lanka in 1796, and conquered the whole island by 1815. Since then the higher education of Sri Lanka has been fashioned by British model.

Present education structure of the country has five years of primary education which is compulsory. Then six years of intermediary level followed by General Certificate of Education (G.C.E) Ordinary Level (O/L) competitive examination conducted at all island level. Students passing G.C.E. (O/L) have the option to select a stream of education to next level which is G.C.E. Advanced Level (A/L) or compelled to follow a stream according to the results of G.C.E (O/L) examination. Next two years which is basically the secondary level will be followed by the highly competitive G.C.E (A/L) examination at all island level to select students for universities.

Sri Lankan University education system commenced in 1942 with the establishment of University of Ceylon which later became University of Peradeniya (Peiris and De Silva 1995) and other universities were established in different times totaling to 15 universities as of today.

3. UNIVERSITY ADMISSION – PROCEDURE

University Grant Commission (UGC) under the Ministry of Higher Education was established on 22nd December 1978 under an act of Parliament, the Universities Act No.16 of 1978. Student selection for admission to undergraduate courses in Sri Lankan universities is assigned to University Grant Commission under the said act. Accordingly, UGC is responsible for the selection and allocation of students for admission to undergraduate courses in 15 national universities, 3 campuses and 5 institutes set up under the Universities Act.

Student selection is based on the G.C.E (A/L) examination results. Selection of students for university admission in an academic year is determined on the basis of rank order on average Z score obtained by candidates at G.C.E (A/L) examination held in the previous year. Commissioner General of Examination release the individual Z score and the ranking together with examination results of the candidate.

Z score is a statistical calculation and is based on three factors.

Raw marks of students for the given subject for the given year.

Mean of the performance of that subject for the given year.

Standard deviation of that subject for the given year.

Z score is dependent on the marks obtained by the students and the total number of students offered a particular subject in a given year.

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Sri Lanka is one of the few countries in the world where University education is free. Students are also provided with free residential facilities and subsidized meals in addition to free education. Further, students from low income families are given bursaries or scholarships too by the government.

Admission to Sri Lankan state universities fall under "free education" policy of the country and therefore is extremely competitive. For example in the year 2017, on total of 253,330 candidates sat for the G.C.E (A/L) examination, 163,104 candidates passed in all 3 subjects and were eligible for university entrance. Then, 78,883 students applied for university admission and only 31,451 students were selected (UGC Sri Lanka statistical reports, 2018). Main reason for lower admission rate being the inadequacy of universities and resources. Admission policy differs between subject streams.

4. ENTREPRENEURSHIP EDUCATION

Entrepreneurship education was pioneered by Shigeru Fijii of Kobe University in 1938 (Alberti et al., 2004). In the 1940s, study programs in small business management began to emerge (Sexton and Bowman, 1984) and in 1947 Myles Mace introduced the first course in entrepreneurship titled 'The Management of the New Enterprise' for MBA students at Harvard Business School in USA (Katz, 2003). Most scholars consider it as the starting point for entrepreneurship education. In 1953, another early course has been taught by Peter Drucker at New York University. While entrepreneurship education in economic and agricultural literature and experiences dating back to 1876 (Katz, 2003), entrepreneurship education as a real force in business schools began in the early 1970s (Kuratko, 2011). Since then the subject gained a universal recognition and now is being taught in thousands of universities and higher educational institutions world over.

According to Gibb (1996) it appears that there is a concurrence that entrepreneurship education and training play a major role in the economic development of a nation.

Entrepreneurship education can nurture the mindsets and develop skills like critical thinking, teamwork and decision making capabilities to support entrepreneurial and innovative intentions (Wilson et al., 2009). Ahmad (2013) views that most universities offer entrepreneurship programs thinking that these programs help university graduates with skills required to become entrepreneurs and to be job creators than job seekers. According to entrepreneurship research, graduate individuals show great potential for entrepreneurship based on their high level of education (Terjesen and Lloyd 2015; Ucbasaran et al., 2008).

Entrepreneurship education is seen as a model for attitude and motive changes while traditional education is useful in transformation of knowledge and abilities (Hansemark, 1998; Fayolle and Gailly, 2015).

In teaching of entrepreneurship, one has to consider many different aspects and involves provision of instructions across wide range of topics (Bannock, 1981). The lecturers need to find an equilibrium between content knowledge (finance, strategy, marketing and human resources) and business skills (innovative thinking, problem solving and teamwork skills).

While one set of authors recommend that entrepreneurship education process should begin at the youngest age possible (Sexton et al., 2000; Raposo and Do Paco, 2011), it is seen that University-level entrepreneurship education is the most vital factor in developing entrepreneurial intention (Sanchez, 2011; Peterman and Kennedy, 2003).

University students in their entrepreneurship education programs are taught on the latest developments giving them an opportunity to implement those developments in venture creation and management in future. Minniti and Levesque (2008) view that what is important is to use high-level skills in starting new businesses and developing them to achieve growth.

Universities worldwide have designed variety of undergraduate, post graduate and diploma level entrepreneurship education courses. These courses range from traditionally structured courses consisting of lecturers, case studies, readings and venture design projects (Vesper, 1986; Honig, 2004) to more innovative courses to cater for the unique characteristics of entrepreneurship students (Sexton and Upton, 1987; Pardede and Lyon, 2012).

Since lately, the focus of entrepreneurship education has moved from its initial position of inspiring students to start new business ventures to a broader concept which stress entrepreneurship as a way of thinking and behaving (Leitch et al., 2012). According to Fayolle (2009), entrepreneurship education consists of all activities to focus on

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to promote entrepreneurial mindsets, skills and attitudes encompassing areas such as opportunity identification, innovation, idea generation, start-up and growth.

Entrepreneurial mindset refers to an innovative way of thinking and doing. Common attributes belonging to entrepreneurial mindset include all those which can be learned including creativity, insight, resilience, self-sufficiency and ability to learn from failure (Kuratko and Morris, 2018; McAlexander et al., 2009). Structure of the entrepreneurship education program calls for a careful thought of specific national and local contextual barriers and opportunities (Ahmed et al., 2020).

Digital entrepreneurship education is a current hot topic and quite feasible as it comes with low start-up and running costs and since it directly addresses students' real life, it can be taught in many educational environments (Kraus et al., 2019).

5. IMPORTANCE OF ENTREPRENEURSHIP EDUCATION FOR SRI LANKA

According to the global research undertaken by the Organization for Economic Co-operation and Development (OECD) and the Global Entrepreneurship Monitor (GEM), there is a direct correlation between entrepreneurial activity and economic growth.

For a developing country such as Sri Lanka, entrepreneurship development is very important for two reasons. On one hand to achieve higher economic development and growth and on the other hand to address increasing unemployment issues.

According to Sri Lanka's Ministry of Industry and Commerce, in 2017, 75% of business enterprises belonged to SME category which was contributing to 45% of country's employment and 52% of the GDP. However, the actual numbers exhibit that the nation's volume of business activity was not sufficient enough to produce the required economic growth. At the same time the statistics of the Department of Labor showed that only 2.8% of the Sri Lanka's working population were employers.

As per the Global Entrepreneurship Monitor 2016/2017 report, status of the adult population aged between 18 - 64 who were either start-up entrepreneurs or owner managers of businesses of some selected countries are given in the Table 1 below.

Table 1
Start-up entrepreneur/ owner manager adult population in some selected countries

Country	Percentage of start-up entrepreneurs/owner managers in 2016	Total Population in Millions
Sri Lanka	2.8	21.2
Malaysia	4.5	30.8
Thailand	17.5	65.3
India	11	1329
Taiwan	8.5	23.5
Kazakhstan	10	17.8
Chile	24	18.2

Source: *Global Entrepreneurship Monitor, 2016 World Population Data Sheet & Dept. of Labor Sri Lanka*

The lesson that Sri Lanka can learn from the rest of the countries in the table 1 is that it needs an at least a 3 fold increase of entrepreneurs and SMEs to fuel economic growth.

Sri Lankan Institute of Policy Studies in a survey carried out in 2014 on small and medium entrepreneurs found that in a sample of 300 entrepreneurs 69 percent were female entrepreneurs and 31 percent were male entrepreneurs. Data collected on the level of education against the percentage of respondents are given in Table 2 and the bar-chart below.

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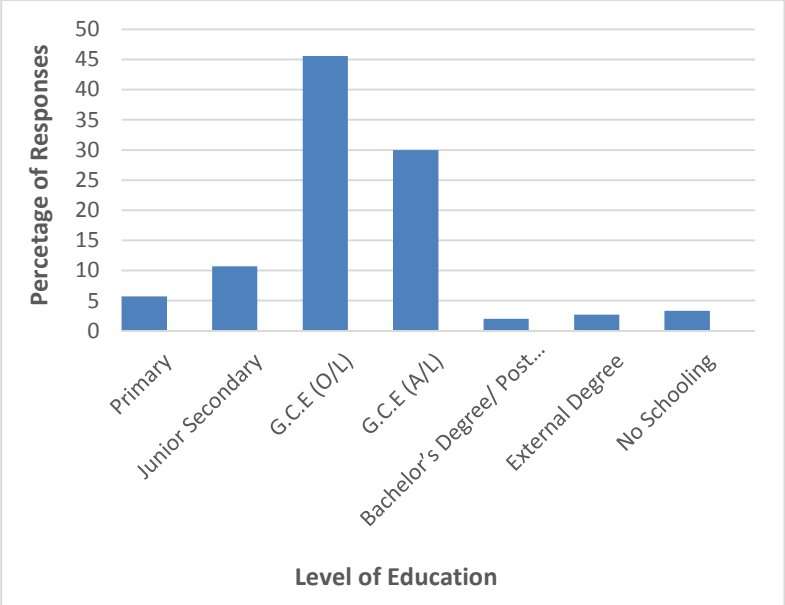
Table 2
Level of Education of SME entrepreneurs

Level of Education	Percentage of responses
Primary	5.7
Junior Secondary	10.7
G.C.E (O/L)	45.6
G.C.E (A/L)	30.0
Bachelor's Degree Post Graduate	2.0
External Degree	2.7
No Schooling	3.3



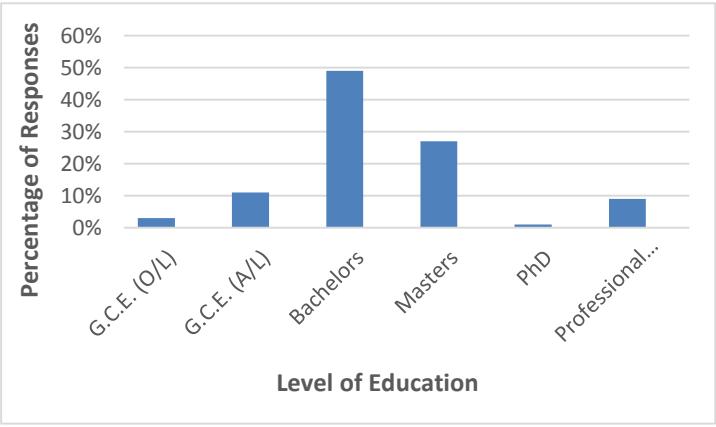
Source: *Institute of Policy studies, Sri Lanka (2014*)

It is very clear from the above data that entrepreneurship among the graduates is the lowest.

However, this is in total contrast to a survey from Sri Lanka Association of Software and Services Companies (SLASSCOM) in 2016 to understand the startup ecosystem in Sri Lanka. In a survey sample consisting 115 aspiring entrepreneurs, 110 existing entrepreneurs, 23 government/industry/corporate/educational bodies and 16 investors, results are as shown in the Table 3 and the corresponding bar-chart below.

Table 3
Level of Education of aspiring/existing SME entrepreneurs in Information Technology (IT) industry

Level of Education	Percentage of Responses
G.C.E. (O/L)	3%
G.C.E. (A/L)	11%
Bachelors	49%
Masters	27%
PhD	1%
Professional Qualifications	9%



Source: *SLASSCOM START-UP Survey 2016)*

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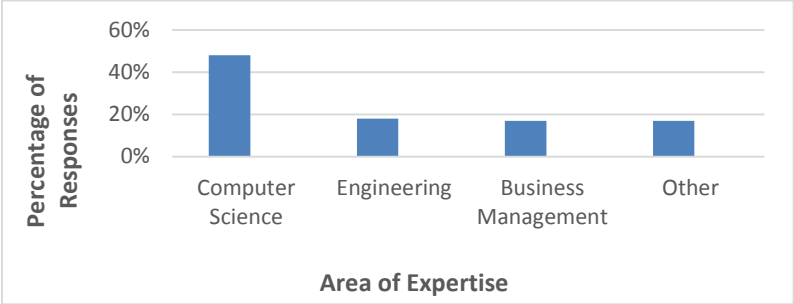
Table 4
Area of expertise of SME entrepreneurs in IT industry

Area of Expertise	Percentage of Responses
Computer Science	48%
Engineering	18%
Business Management	17%
Other	17%



Source: *SLASSCOM START-UP Survey 2016*

86 percent of respondents were with Bachelor's or higher qualifications out of which more than 65 percent were with computer science or engineering as core area of expertise as shown in Table 3 and the corresponding bar-chart above. Main reason being the nature of business is more technical and innovative in nature. Since Computer Science is more inclined to engineering, the data in this table 4 is in support of the previous findings by Tessema (2012), Pretheeba (2014) and Kolvereid and Isaksen (2006) to show that engineering students have more entrepreneurial attitudes compared to management students.

In a research on educational and professional background of 60 executives and entrepreneurs in the tourism industry in Sri Lanka, academic researchers from University of Colombo have found that only 11.6 percent of the total respondents were degree holders.

6. CONSTRAINTS AND CHALLENGES

6.1 Lack of selection of required courses for Majority of students

Sri Lankan universities have the autonomy to offer different courses of study which suits their expertise and facilities. There could be slight differences in the titles of similar courses of study offered by different universities. Eligibility to apply for a particular course of study is dependent on the subjects offered at the G.C.E (A/L) examination. Subjects available at the G.C.E (A/L) examination are classified in to six main streams namely Arts stream, Commerce stream, Biological science stream, Physical science stream, Engineering technology stream and Bio systems technology stream.

The availability of the university study programs are also in line with these streams with some exceptions of possibility of following limited number of courses while having completed G.C.E (A/L) examination in some other stream.

While reviewing the existing study programs, it can be seen that a large number of students follow courses that are not geared to employment opportunities. Many students opt for soft combinations because in rural schools from where a large number of students enter the university, facilities do not exist for technological, business or entrepreneurial studies.

Income disparities also has a major effect on the choice of subjects in undergraduate studies.

In Sri Lanka, the practice of "open days" concept among government universities is nonexistent and prospective students have no access to university teachers and senior students prior to admitting to the university while in developed countries open days are perceived as the most reliable source of information for a prospective entrant to select a program of study.

Another deficiency in the Sri Lankan university system is the lack of selection of modules within a degree program. In most situations, optional modules too are in the same subject areas as core modules. For example modules in physical Science or geological science degree programs are geared towards preparing graduates for public sector employment such as teaching whereas modules in product design or entrepreneurship or innovation will provide a wider selection for the students as well as would mold them for more rewarding employment opportunities. Similarly a student in an accounting degree program is not permitted to study modules like

marketing or HRM in depth than general optional modules. Unfortunately, Sri Lankan students do not have much freedom to select their own electives and are limited by fixed modules within their allotted programs.

Due to the strict university entrance procedures, unlike with higher educational institutes in developed countries Sri Lankan students cannot enjoy much flexibility such as expectation of course completion whether " on time", "as soon as possible" to "sometime in the future" in undergraduate programs including entrepreneurship. Similarly unavailability of entrepreneurship education as short term courses at Diploma or Certificate level in most universities limit the students' choices further.

With the establishment of Uva Wellassa University as an entrepreneurial university in 2005 where students received training via market oriented programs, formal entrepreneurship education commenced in Sri Lanka. University of Sri Jayawardenepura being the premier management university in Sri Lanka established its Department of Entrepreneurship in 2010 and commenced its Bachelor of Science (B.Sc.) Entrepreneurship Special Degree program in the same year and Masters Degree program in 2014. Further, B.Sc. General and Special degree programs in Biology at University of Sri Jayawardenapura has Entrepreneurship development as an optional study module while B.Sc. Special in Food Science & Technology and B.Sc. in Management Science degrees have entrepreneurship study modules in the fourth year as core modules. However, no other faculties/programs offer entrepreneurship related modules.

In spite of Universities of Kelaniya, Ruhuna, Uwa Wellassa and Eastern offering Bachelor's degree programs in entrepreneurship or similar degrees, the total number of entrepreneurship related degree programs in Sri Lanka is in far less to the 13 courses in entrepreneurship offered in 10 higher educational institutions of geographically and population wise much smaller neighboring Singapore. It is much noticeable that none of the engineering degree programs in Sri Lankan universities offer entrepreneurship studies though the entrepreneurship has transformed into technopreneurship all over the world.

Sri Lanka can learn lessons from the developed world to improve its entrepreneurship education. British and North American higher education institutes have been increasingly offering courses in entrepreneurship as part of the undergraduate and post graduate programs (Watkins and Stone 1999; Finkle and Deeds 2001; Ibrahim and Soufani 2002; Klapper 2004; Adcroft et al., 2004) . US universities made available entrepreneurship "majors" since early 1980s (Hills 1988). Both countries embraced the proposition that entrepreneurial qualities can be developed through the education system (Gibb 1987; Klapper 2004) and started nurturing "enterprise culture".

6.2 Lack of entrepreneurial skills in lecturers

Universities have traditionally being the places where the transfer process for students with required knowledge through the selected degree program takes place. In this very important education supply chain, the academia are tasked with teaching students with accepted and relevant business doctrine and practices. Harvey (2000) states that the primary role of higher education is to train students to enhance their abilities, skills, knowledge and attributes and to motivate them to lifelong critical and reflective learning.

Entrepreneurship is an evolving subject with a large extent of action orientation. Therefore, the lecturers should be well versed with their lesson plans, objectives, contents and teaching methods in teaching entrepreneurship education.

Ability of the lecturers to communicate effectively with students is extremely important to the quality of the program. Effectiveness of entrepreneurship education program is based on how interactive and activity based it is. Those type of programs lead to critical and analytical thinking.

When students perceive their lecturers as entrepreneurially minded, it will build entrepreneurial intentions in them through entrepreneurship education. For this the lecturer should exhibit the entrepreneurial attitudes and behavior (Otache, 2019).

Albert Bandura's (1971) social learning theory clearly stress the point that a new behavior can be acquired by observing, imitating and role modelling other people. Applying the theory to entrepreneurship education, entrepreneurially minded lecturers and successful entrepreneurs are able to influence student's entrepreneurial intention and behaviors. Pihie and Bagheri (2011) argue that entrepreneurially minded teachers help to enhance the impact of entrepreneurship education on student's entrepreneurial intentions. According to Ali et al., (2009), entrepreneurially minded teacher is required to effectively implement the entrepreneurship education.

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To effectively transfer the entrepreneurial knowledge and skills to students, entrepreneurship education lecturers themselves must posses entrepreneurial knowledge and skills. The majority of Sri Lankan university lecturers of entrepreneurship education are from business administration, commerce or accounting based bachelor's background lack the in-depth knowledge of entrepreneurial skills or the experience. For example, the premier university in entrepreneurship education, University of Sri Jayawardenepura entrepreneurship faculty consists Masters and/or Bachelor's degree in Business administration while only one member has a Bachelor's in Entrepreneurship. University of Kelaniya with a Bachelor's Degree in Entrepreneurship has 02 PhDs, 01 MPhil and 02 Bachelor's degree holders in entrepreneurship is comparatively well positioned than other universities. Dearth of specialized entrepreneurship lecturers is a common issue in all Sri Lankan universities.

Yamahawa et al, (2016) highlight that academics prefer a theory-based approach for entrepreneurship education focusing engaging students into theories of entrepreneurship. But practitioners believe in a practice-based approach focusing to develop entrepreneurial skills by using real-life experiences of entrepreneurs. However, Neck and Green (2011) argue that good theory without an action is only a busy work and action without a theory is not worth learning. Hence entrepreneurship lecturers must be capable of adapting both a theory and practice-based pedagogies for effective teaching as the two are a sine qua non condition.

In the recent past business plan competitions among university students have been introduced by some faculties with the help of business communities and is becoming increasingly popular as an opportunity to stimulate entrepreneurship development skills among university students. Writing a business plan is viewed as an expression of entrepreneurial intentions (Honig and Karlsson 2004; White et al., 2011).

6.3 Lack of required resources

Sri Lankan universities are squeezed for the availability of funds. Funds allocated by the central government are being based on proceeding years, grants adjusted for some inflation, increments in salaries and newly approved posts. This has no direct relationship to student enrolment or number and nature of the faculties. No relationship to the cost per student in the respective faculties.

In view of required resources, the biggest challenge is the recruitment of lecturers with good entrepreneurship skills in to the permanent cadre when they are being sought after by the private sector for much higher perks. The situation is even more difficult when it comes to remote universities.

For successful implementation of entrepreneurship education programs an adequate level of funding is required for state-of-the-art buildings, equipment, training for trainer and seed capital for students to effectively execute their business plans. Agbonlahor (2016) infers to deliver practical and quality-oriented entrepreneurship programs, substantial capital investment is required for the infrastructure. There is lot of rhetoric from governments on the importance of entrepreneurship for economic development but still less is done to fund such areas (Oketch 2009). Kingombe (2012) argues that in developing countries a vast majority of resources available are spent on social services leaving funding for skills development is scarce.

In Sri Lankan universities, traditional degree programs take the form of closed classroom lectures and examinations. But for entrepreneurship education, this model will not help to develop entrepreneurial skills within students and hence different and more practice oriented teaching models may need to be adopted. More technologically focused entrepreneurial skills development, collaborative technopreneurship programs with other local as well as foreign universities , establishing incubating centers in the university for the students to set up start-ups and experience real world business operations, providing seed capital, establishing laboratory environments for those students interested in new product innovation, field trips and field studies to identify unfulfilled needs of various social groups and to identify the business opportunities thereby are some of the different teaching models that Sri Lankan universities can adopt to enrich entrepreneurship education.

Access to capital is one of the obstacles that university students always fear of when thinking of a start-up or a new business. In developing economies potential entrepreneurs consider lack of access to capital and credit schemes and limitation in financial systems as barriers to successful business innovation (Marsden, 1992; Meier and Pilgrim, 1994).

Purpose of business incubation centers are to accelerate successful development of up and coming companies through a range of support services and resources. They have become the center point of infrastructure support

for SME and entrepreneurship (Aernoudt, 2004; Barrow, 2001). University-based Business incubators establish strong links with industries, R&D centers and similar entities overseas.

6.4 Weak government policies

The development of entrepreneurship education is closely related to government policies (Lin and Xu, 2016). Whilst countries world over exerting more effort to develop entrepreneurship and entrepreneurship education through their respective government mechanisms, Sri Lanka seems to have paid less attention to this important area to date. There is no evidence of a centralized well-coordinated effort among different government ministries. Ministry of Higher Education has a goal for increased entrepreneurship of graduates which is a very broad goal and without a concrete action plan. Ministry of Enterprise Development and Investment Promotion has a goal to encourage universities and other tertiary sector institutions to provide training support for SMEs and to foster university – business linkages for curriculum development of Higher Education Institutes in consultation with SMEs.

Entrepreneurial studies was introduced as a new subject for Grade 10 and 11 Senior Secondary level of the Sri Lankan school system in 2015 which is a very thoughtful initiative. But at the end of the G.C.E. (Ordinary Level) examination students sit after the completion of Grade 11 there is no entrepreneurship education in Grade 12 and 13 before the university entrance examination. After admitting to the university, entrepreneurship education is again not for all. This shows that there is no consistency in the whole system and hence there is a need for a national policy for curricula and progressive entrepreneurship education.

In both developed and developing countries integration of entrepreneurship education into national curricula has been successful (European Commision 2012, Udu and Amadi 2013; Achor and Kate 2013). European Commission in its "Europe 2020 Strategy" has strongly proposed to include innovation, creativity and entrepreneurship into it's education systems (European Commission 2012).

An economic super power China introduced entrepreneurship education as an academic topic in 2000 and by end of 2015, Chinese publishers had published 371 textbooks in entrepreneurship (Lin and Xu, 2016).
Since late 1990s Japanese government launched several policies supporting university led innovations and one of the most recent policies is 'Enhancing Development of Global Entrepreneur' ran from 2014 to 2016, supporting universities to conduct education programs to encourage students to find innovative solutions to diverse issues (Kim, 2016).

In Sweden entrepreneurship education is widely available in Swedish higher education system. Out of 51 universities and colleges, 37 offered some form of entrepreneurship in 2013 mainly in the form of single courses and degree programs. In recent years, Swedish government has given a very high priority to the promotion of the knowledge and innovation systems related to universities and priority areas for policy have been the way universities work to identify ideas and stimulate entrepreneurship, collaborate with established firms in the public and private sector and how they establish and improve entrepreneurship education to students (Zaring et al., 2019, Swedish National Agency for Education, 2008).

It should be a key initiative of the government to promote entrepreneurship education to trigger the broader national economy like the countries mentioned above and like East Asian Tiger economies by playing an important role developing appropriate policies to support entrepreneurship education.

6.5 Widening Industry – University relationship gap

Traditionally, universities are seen as providers of human resources to business and the government. However, in many countries of the developed and developing world the model has changed. Industry-university collaborative relationships are strengthening through collaborative projects, promoting development and application of new technologies, R&D partnerships and entrepreneurship development.

Levels of skills demanded by employers are in continuously increasing trends because of a) ever increasing competition b) improving technologies c) digital disruption and birth of new business models and d) use of quality and customization as key differentiators. Higher education institutes worldwide are being blamed of producing graduates lacking soft skills required for work place innovations and productivity. The blame is directed to the design, content and the structure of undergraduate programs.

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Building and strengthening university-industry relationship is a subject discussed world over. The difference is the intensity and effectiveness of this relationship in individual countries. Sri Lanka is no difference. Education sector development project (2008) funded by the world bank found that Sri Lankan university interactions with the industry were predominantly by way of consultancy and training programs while interactions by industry with universities predominantly consisted provisions of student internships, attendance at seminars, workshops, symposiums and conferences and informal contacts with academics . It is also a well-known fact that engineering related departments have more and regular contacts with the industry than that were found in humanities based departments. Further, there is lack of research in Sri Lanka to facilitate formulating policies to develop university-industry relationships.

Interactions between universities and the industry exists in many forms. Lester (2005) states that at least four separate kinds of interactions exist at the university-industry interface. First, is being the educator for the people and providing human resources to the industry which is the primary role of a university. Second, is the role of enhancing the inventory of explicit knowledge useful to the business with research activity. Third, is the role of problem solving to help business needs. Fourth, is the public space functions which consists of the interaction between the academia and the business community. These include social interactions, meetings and conferences, acting as the center that promotes entrepreneurship and entrepreneurial activities and provision of internships. The relationships built through these spaces will feed back to first three roles. Since the industry is busy meeting with day to day business challenges, universities need to take initiatives to build these relationships. If universities wish to strengthen the relationships with the industry, it is of paramount importance for the academics to understand the needs of the industry and offer solutions which are practical and implementable.

Gordon et al., (2012) highlights different studies with University of Lancaster, UK during a period of 3 years found that appropriate engagements between the university and regional small businesses yielded tangible benefits by way of abundant opportunities for student placements, increased access to companies and entrepreneurs for research purposes, support from practitioners as resource persons for entrepreneurship teaching and changed perception of business community towards university for their willingness to engage with the business.

To encourage joint research between university and industry, Sri Lankan government has provided a 300% of research expenditure as a tax concession to the industry through successive annual budgets. But that too has not been able to increase university-industry joint research.

6.6 Poor attention to stakeholder engagement, influence and expectations

One very important element to the success and implementation of entrepreneurial skills development among university students is the support of stake holders e.g. students, academia, parents and future employers (Gunn, 1994). Freeman (1984) states that an organization can be characterized by its relationship with the stakeholders. Further, Freeman (1984) defines a stakeholder as "any individual or a group who can affect or is affected by the achievements of the organization's objectives". Donaldson and Preston (1995) refine this definition as to be identified as a stakeholder, the individual or the group must have legitimate interest in the organization.

Amaral and Magalhaes (2002) define stakeholder in relation to higher education as;
[…] a person or entity with a legitimate interest in higher education and who as such acquires the right to intervene.
To a greater extent, the success of a higher educational institute depends on its ability to address the needs of its stakeholders. Stakeholders include all those organizations, networks and people that can impact or able to influence the objectives of the organization (Alves et al., 2010; Freeman 1984; Freeman and Evan 1990; Mitchell et al., 1997).

There is no clear evidence or data to prove if Sri Lankan state universities do follow the stakeholder theory except some efforts to develop industry relationships whereas Vollmers et al., (2001) state that stakeholders in USA including students, academia, alumni and the business community play an important role in developing entrepreneurship education curriculum that is relevant to local and regional development.

7. CONCLUSION AND RECOMMENDATİONS

The entrepreneurship education is considered a vital ingredient for the sustainable economic development of a country. In the case of developing countries such as Sri Lanka, it has been poorly embedded into the higher education system with no recognizable impact. In addition to the late entry into the entrepreneurship education, Sri Lankan state sector higher educational institutes are faced with number of challenges and constraints.

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To overcome these issues, Sri Lankan universities should seriously consider of adopting global best practices. They should develop a strategic plan and select a suitable structure to execute that plan. Teaching of entrepreneurship as a subject is to share knowledge with students and teaching entrepreneurship as a full course should make the path for students to create businesses. Different levels of entrepreneurship education courses must be made available to other departments outside management. Globally ranked universities do not offer a separate degree or qualifications in entrepreneurship but almost everywhere included in formal programs as a module or at least as an elective in some of the courses or in all of the courses.

To develop entrepreneurship education within the higher education system in Sri Lanka there should be a two prone approach. On one side, to ensure that the entrepreneurship education is able to deal with global, technological and market changes, it is imperative that Sri Lankan universities prepare appropriate curricula, course material and teaching models which are not only up-to-date but also internationally competitive so that the universities not only can keep a track of areas of specialization in demand but also be able to adapt them to local environment without losing the international flavor. Secondly, Sri Lankan formal higher education system should take a more outward looking approach and encourage and facilitate students for business innovation and to generate new knowledge that can be offered to the industry. To enhance the entrepreneurship education in Sri Lankan state universities, following steps are recommended.

- Set up a center for entrepreneurship and entrepreneurship education with a mandate to co-ordinate all entrepreneurship education initiatives in the country.

- Entrepreneurship education should be available to all business as well as non-business students. There must be a government-driven policy to encourage all universities to make entrepreneurship education modules compulsory for all undergraduate programs.

- Universities must organize stimulants such as business plan competitions, innovation championships, business incubation and seed funding to develop entrepreneurship among students.

- The lecturer has a very important role to play in stimulating the knowledge and teaching environment when introducing entrepreneurship education. Sri Lanka should develop its university lecturers or educators to be competent and efficient enough to face the growing local and global demand. External quality reviews by accredited agencies will improve teaching methods.

- Sri Lankan universities must engage in the local business ecosystems connecting academia with enterprises to bring up networks of entrepreneurs, venture capitalists and business community and all stake-holders. Establish links with SME sector enterprises and assist them in addressing their technical problems.

- Sri Lankan government has a larger role to play to enhance its entrepreneurship education within the higher educational institutes by way of streamlining and updating its relevant policies and assisting universities with required resources.

- Government should encourage universities to raise funds through strategic partnerships with business communities, non-governmental organizations (NGOs) and international entrepreneurship centers.

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